

The Tribune, More visitors means more damage a SLO County's tide pools, By David Sneed (Monterey Bay National Marine Sanctuary), June 2, 2004

TOO MUCH HUMAN ATTENTION – even affection -- is seriously damaging some tide pools along San Luis Obispo County's coastline.

As more and more areas open to the public, many people will be experiencing the fun of discovering strange and colorful tide-pool creatures. But too many of them are treating nature like a touch tank, even taking home souvenirs.

It is easy to spot a tide pool that receives a lot of human visitation, said Pete Raimondi, a UC Santa Cruz marine biologist and expert on coastal ecosystems. There's a lot more bare rock and a smaller diversity of animals. Large gastropods, such as abalone and giant owl limpets, as well as sea and bat stars are much scarcer.

Resource managers are working to find ways to accommodate this influx of shoreline visitors without allowing them to damage the fragile marine life that lives there.

Researchers are noticing stark differences between tide pools frequented by humans and those too remote or protected for people to visit.

"We have to come up with ways to minimize the impacts without blocking access," said Raimondi.

Damage occurs in three ways, Raimondi said.

- Trampling -- Even the toughest mussels and barnacles cannot tolerate being repeatedly stepped on. Various forms of algae, such as rockweed and surf grass, are particularly sensitive to trampling.
- Collecting -- Some visitors take home plants and animals as specimens, or to eat, or use them as bait. Collecting is a particularly big problem in coastal areas near big cities but is a minor problem in San Luis Obispo County.
- Lack of tide-pool etiquette -- The most common forms of destructive behavior are picking up an animal and not putting it back

where it came from and turning over rocks and not replacing them, exposing the animals underneath to drying out and predation.

Teaching etiquette

On a bright spring morning at Montaña de Oro State Park, naturalist Steve Schubert explains tide-pool etiquette to a group of 18 fidgety Kern County fifth-graders.

The boys excitedly spread out to explore the tide pools of Corallina Cove. Soon, they are finding ochre sea stars, giant green anemones and hermit crabs living in turban-snail shells.

"A lot of these boys are seeing these animals for the first time in their lives," Schubert explains.

By the time Schubert's fifth-graders are done with their field trip, they are experts on tide-pool etiquette. Tide-pooling is part of the boys' three-day curriculum at Montaña de Oro's Camp Keep, an environmental education program.

Schubert tells them that stepping on tide-pool plants not only damages them but is dangerous. They are slippery. He also admonishes them not to feed one tide-pool animal to another.

"Why not?" asks one disappointed camper.

"We are here to study the animals, not kill them," Schubert answers.

More access

San Luis Obispo County is blessed with many healthy tide pools, Raimondi said. Large parts of the coast are privately owned with minimal public access. These include the Hearst Ranch and the land around Diablo Canyon nuclear power plant.

If a pending \$95 million conservation deal comes to fruition, much of the 18 miles of coastline in the Hearst Ranch will become public land. Raimondi wants the various coastal resource managers, including state parks, the Bureau of Land Management, and Monterey Bay National Marine Sanctuary, to devise a region-wide tide-pool management plan.

Other tide-pool areas are part of extensive state park holdings in the county. In addition to Montaña de Oro, the state Parks Department manages tide pools at Cambria's Moonstone Beach and the Estero Bluffs near Cayucos. The newly acquired Sea West Ranch near Harmony also has tide pools but is not yet open to the public.

State rangers protect their tide pools by focusing public access on a small number of pools, such as Corallina Cove. Hiking trails lead directly to these pools but avoid other areas where public use is minimized, said Greg Smith, coastal sector superintendent.

"We have an ongoing monitoring program to assess the impact," he said. "It's a concern of ours."

The department tries to educate visitors using interpretive signs that warn people not to collect and watch where they step. At Moonstone Beach, it also occasionally rotates access among tide pools.

While this method results in some tide pools being damaged, Raimondi believes the resulting increase in public appreciation of marine environmental issues more than compensates for the damage. "I love the idea that the public is interested in near-shore marine issues," he said. "Now, management becomes a much more important issue."